

Abstract

The high-pressure pump has a housing (10, 14, 22) containing at least one pump element (18) that has a pump piston (20) driven into a stroke motion by a drive shaft (12); the pump piston (20) is guided so that it can slide in a cylinder bore (28) of a housing part (22) and delimits a pumping chamber (30) therein. A support element (40) supports the pump piston (20) against the drive shaft (12); and a prestressed return spring (60) acts on both the pump piston (20) and the support element (40) in the direction toward the drive shaft (12). The support element (40) is guided so that it can slide in a receptacle (46), which is contained in the housing part (22) that also contains the cylinder bore (28), in the direction of the longitudinal axis (21) of the pump piston (20), but cannot rotate around the longitudinal axis (21).